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EXAMINER

HARRINGTON, ALICIA M

ART UNIT PAPER NUMBER

2873

DATE MAILED: 11/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/824,231

Applicant(s)

KUSHIDA ET AL.

Examiner

Alicia M Harrington

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 19 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13 and 15-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-13 and 15-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Rasaat (EP 0338703).

Regarding claim 1, Rasaat discloses a display for a motorcycle which provides velocity (col. 2, lines 40-50 and vol. 5, lines 40-45) information to the driver that is projected on the screen of the motorcycle in front of a riding position of the driver, where the visual field of the driver is divided into a central field and peripheral field on the screen and the image is located in the peripheral field (see col. 3, lines 30-52). The image is a linear pattern (see figure 5) extending the peripheral field of view. *Further Webster defines stripe as a line or long narrow section differing in color or texture. Webster defines linear as composed of simply drawn lines with little attempt at pictorial presentation. Applicant illustration of the image is a group of circles in a linear patter. Thus the drawing figure 5 of Rasaat is defined by Webster to be a stripe or linear pattern.*

Regarding claim 2, Rasaat discloses the image is above the central field (col. 3, lines 47-52).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

Claims 4-5,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasaat, as applied above in claim 1, in view of Hennessy et al (US 6,014,117).

Regarding claim 4, Rasaat discloses the image is 15 degrees from the center point. However, Rasaat fails to specifically disclose the width of the image the horizontal direction is determined the angle formed between two lines extending from a point in the central field to both ends of the image is at least 20 degrees. However, Hennessy teaches that display system with convey vehicle guidance information is generally displayed within 30 degrees of vision of the central field of view of the user (col. 1, lines 60-67 and col. 3, lines 38-50). And Hennessy further illustrates an embodiment where information can be displayed in peripheral field of view. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat, such that the angle of the two lines extending from a point in the central region be at least 20 to prevent eye strain.

Regarding claim 5, Rasaat discloses the image is 15 degrees from the center point. However, Rasaat fails to specifically disclose the width of the image the horizontal direction is determined the angle formed between two lines extending from an uppermost and lowermost

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point in the central field to both ends of the image is at least greater than 20 degrees. However, Hennessy teaches that display system with convey vehicle guidance information is generally displayed within 30 degrees of vision of the central field of view of the user (col. 1, lines 60-67 and col. 3, lines 38-50). And Hennessy further illustrates an embodiment where information can be displayed in peripheral field of view at angle of greater than 20 degrees. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat, such that the angle of the two lines extending from a point in the central region be at least 20 to prevent eye strain, and reduce the cognitive and visual demands of the user.

Regarding claim 20, Rasaat discloses a motorcycle with a central and a peripheral field where the image is displayed. Hennessy further illustrates an embodiment where information can be displayed in peripheral field of view at angle of greater than 20 degrees. And the Examiner takes official notice that displaying image information in the peripheral regions around the central region is notoriously well known to head display equipment. Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat and Hennessy to provide information in the bottom peripheral portion of the screen since displaying information in the bottom peripheral region is well known in the art.

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasaat, as applied above in claim 1, in view of Lu (US 4,998,976)

Regarding claim 6, Rasaat has an electronic display for providing information to the user. However, Rasaat fails to specifically disclose the display is a projection display. Although, it is well known in the art, as taught by Lu. In the same field of endeavor, Lu discloses a display unit for motorcycles where a projection display (see figure 9 and 10) is incorporated to project an

image on the windshield or helmet of user. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat, as taught by Lu, to provide a projection display device to provide information in the viewer line of sight.

Regarding claim 7, as discussed above in claim 6, Rasaat has an electronic display for providing information to the user. However, Rasaat fails to specifically disclose the display is a projection display comprises a plurality of light sources. Lu discloses using vacuum fluorescent display as the projection display apparatus. And the Examiner takes official notice that a projector comprising a plurality of light sources is notoriously well known in the art of projection systems. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a projector as claimed, to provide a clear and bright image.

Regarding claim 8, as discussed above in claim 6, Rasaat has an electronic display for providing information to the user. However, Rasaat fails to specifically disclose the display is a projection display comprises a plurality of light sources and other claimed features. Although, Lu disclose using vacuum fluorescent display as the projection display apparatus where the projector is on a substrate in case with a lens for covering a portion of the case (see figure 10 and col. 15-35). And the Examiner takes official notice that a projector comprising a plurality of light sources is notoriously well known in the art of projection systems. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a projector as claimed, to provide a clear and bright image.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rasaat in view of Lu (US 4,998,976), as applied above in claim 8, further in view of Hennessy et al (US 6,014,117).

Regarding claim 9, as discussed above, Rasaat and Lu disclose a motorcycle with projection system. , Rasaat further discloses the image is 15 degrees from the center point. However, Rasaat and Lu fail to specifically disclose the width of the image the horizontal direction is determined the angle formed between two lines extending from an uppermost and lowermost point in the central field to both ends of the image is at least greater than 20 degrees. Although, Hennessy teaches that a display system that conveys vehicle guidance information is generally displayed within 30 degrees of vision of the central field of view of the user (col. 1, lines 60-67 and col. 3, lines 38-50). And Hennessy further illustrates an embodiment where information can be displayed in peripheral field of view at angle of greater than 20 degrees. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat, such that the angle of the two lines extending from a point in the central region be at least 20 to prevent eye strain, and reduce the cognitive and visual demands of the user.

Claims 10-13,21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasaat in view of Lu (US 4,998,976)

Regarding claim 10, Rasaat discloses a display for a motorcycle which provides velocity (col. 2, lines 40-50 and vol. 5, lines 40-45) information to the driver that is projected on the screen of the motorcycle in front of a riding position of the driver, where the visual field of the driver is divided into a central field and peripheral field on the screen and the image is located in the peripheral field (see col. 3, lines 30-52). Rasaat has an electronic display for providing information to the user. The image is a linear pattern (see figure 5) extending the peripheral field of view. *Further Webster defines stripe as a line or long narrow section differing in color or*

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*texture. Webster defines linear as composed of simply drawn lines with little attempt at pictorial presentation. Applicant illustration of the image is a group of circles in a linear pattern. Thus the drawing figure 5 of Rasaat is defined by Webster to be a stripe or linear pattern.*

However, Rasaat fails to specifically disclose the display is a projection display.

Although, it is well known in the art, as taught by Lu. In the same field of endeavor, Lu discloses a display unit for motorcycles where a projection display (see figure 9 and 10) is incorporated to project an image on the windshield or helmet of user. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat, as taught by Lu, to provide a projection display device to provide information in the viewer line of sight.

Further, Rasaat discloses the display information is above the central position. And the information is fifteen degrees from the center point. However, Rasaat fails to specifically disclose the view is approximately six degrees in the vertical direction as defined by 90 percent of all drivers riding posture on the motorcycle. Since Rasaat and Lu disclose the claimed invention except for field of view defined as six degrees in the vertical direction, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide this feature, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. In re aller, 105 USPQ 233.

Regarding claim 11, as discussed above in claim 10, Rasaat has an electronic display for providing information to the user. However, Rasaat fails to specifically disclose the display is a projection display comprises a plurality of light sources. Lu discloses using vacuum fluorescent display as the projection display apparatus. And the Examiner takes official notice that a



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projector comprising a plurality of light sources is notoriously well known in the art of projection systems. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a projector as claimed, to provide a clear and bright image.

Regarding claim 12, as discussed above in claim 10, Rasaat has an electronic display for providing information to the user. However, Rasaat fails to specifically disclose the display is a projection display comprises a plurality of light sources and other claimed features. Although, Lu disclose using vacuum fluorescent display as the projection display apparatus where the projector is on a substrate in case with a lens for covering a portion of the case (see figure 10 and col. 15-35). And the Examiner takes official notice that a projector comprising a plurality of light sources is notoriously well known in the art of projection systems. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a projector as claimed, to provide a clear and bright image.

Regarding claim 13, Rasaat discloses the image is above the central field (col. 3, lines 47-52).

Regarding claim 21, Rasaat and Lu disclose a motorcycle with a central and a peripheral field where the image is displayed. And the Examiner takes official notice that displaying image information in the peripheral regions around the central region is notoriously well known to head display equipment. Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat to provide information in the bottom peripheral portion of the screen since displaying information in the bottom peripheral region is well known in the art.

Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasaat in view of Lu, as applied above in claim 10, further in view of Hennessy et al (US 6,014,117).

Regarding claim 15, Rasaat discloses the image is 15 degrees from the center point. However, Rasaat and Lu fail to specifically disclose the width of the image the horizontal direction is determined the angle formed between two lines extended from a point in the central field to both ends of the image is at least 20 degrees. However, Hennessy teaches that display system with convey vehicle guidance information is generally displayed within 30 degrees of vision of the central field of view of the user (col. 1, lines 60-67 and col. 3, lines 38-50). And Hennessy further illustrates an embodiment where information can be displayed in peripheral field of view. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat and Lu, such that the angle of the two lines extending from a point in the central region be at least 20 to prevent eye strain.

Regarding claim 16, Rasaat discloses the image is 15 degrees from the center point. However, Rasaat and Lu fails to specifically disclose the width of the image the horizontal direction is determined the angle formed between two lines extending from an uppermost and lowermost point in the central field to both ends of the image is at least greater than 20 degrees. However, Hennessy teaches that display system with convey vehicle guidance information is generally displayed within 30 degrees of vision of the central field of view of the user (col. 1, lines 60-67 and col. 3, lines 38-50). And Hennessy further illustrates an embodiment where information can be displayed in peripheral field of view at angle of greater than 20 degrees. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was

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made to modify Rasaat, such that the angle of the two lines extending from a point in the central region be at least 20 to prevent eye strain, and reduce the cognitive and visual demands of the user.

Regarding claim 17-18, as discussed above in claim 16, Rasaat has an electronic display for providing information to the user. However, Rasaat fails to specifically disclose the display is a projection display comprises a plurality of light sources and other claimed features. Although, Lu disclose using vacuum fluorescent display as the projection display apparatus where the projector is on a substrate in case with a lens for covering a portion of the case (see figure 10 and col. 15-35). And the Examiner takes official notice that a projector comprising a plurality of light sources is notoriously well known in the art of projection systems. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a projector as claimed, to provide a clear and bright image.

Regarding claim 19, Rasaat discloses the image is above the central field (col. 3, lines 47-52; figure 5).

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Response to Arguments***

Applicant's arguments filed 9/19/02 have been fully considered but they are not persuasive. Applicant major argument is that image in Rasaat is not a stripe or linear pattern. However, the Examiner respectfully disagrees. Webster defines stripe as a line or long narrow section differing in color or texture. Webster defines linear as composed of simply drawn lines with little attempt at pictorial presentation. Applicant illustration of the image is a group of circles in a linear pattern. Thus the drawing figure 5 of Rasaat is defined by Webster to be a stripe or linear pattern.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M Harrington whose telephone number is 703 308 9295. The examiner can normally be reached on Monday - Thursday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 703 308 4883. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308 7724 for regular communications and 703 308 7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

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Alicia M Harrington  
Examiner  
Art Unit 2873

*AMH*  
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November 25, 2002

*Georgia Epps*  
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